What is claimed is:

1. A system for the asymmetrical transport of data over a network, the system comprising:

a data head end that is communicatively coupled to the network and to at least one data source;

at least one service unit coupled to the network;

an encoder that couples the data head end to the network, wherein the encoder modulates data from the at least one data source using a first modulation technique and transmits the modulated data over the network in a first frequency band to selected service units ("downstream transmission"); and

each service unit including a decoder for demodulating data from the downstream transmission and a modulator that modulates data using a second, different modulation technique for transmission to the data head end over the same network in a second frequency band ("upstream transmission"), such that the data rate of the downstream transmission is different from the data rate of the upstream transmission.

2. The system of claim 1, wherein the encoder is a quadrature amplitude modulation (QAM) 64 encoder.

3. The system of claim 1, wherein the data head end includes a full duplex 100 BaseT Ethernet connection to a switched Ethernet network.

4. The system of claim 1, wherein the data head end is coupled to the Internet.

5. The system of claim 1, and further comprising a telephony head end, coupled to the data head end and to the network, that transmits telephony data over the same network at a data rate different from the downstream transmission and that receives the upstream transmission for the data head end.

6. The system of claim 5, wherein the telephony head end includes a communication link with the data head end.

7. The system of claim 6, wherein the communication link includes at least one T1 or E1 communication link.

8. The system of claim 1, wherein the network is a hybrid fiber/coax network.

9. The system of claim 1, wherein the data rate of the downstream transmission is greater than the data rate of the upstream transmission.

10. A head end for an asymmetrical data transport network, the head end comprising:

a data head end having at least one interface for connection to a data source;

an encoder, communicatively coupled with the data source through the at least one interface of the data head end, wherein the encoder modulates data from the at least one data source using a first modulation technique and transmits the modulated data over the network in a first frequency band to selected service units ("downstream transmission"); and

a telephony head end that receives data from service units for the data head end, wherein the data from the service units is modulated using a second, different modulation technique for transmission over the same network in a second frequency band ("upstream transmission"), such that the data rate of the downstream transmission is different from the data rate of the upstream transmission.

11. The head end of claim 10, wherein the encoder is a quadrature amplitude modulation (QAM) 64 encoder.

12. The head end of claim 10, wherein the at least one interface of the data head end includes a full duplex 100 BaseT Ethernet connection to a switched Ethernet network.

13. The head end of claim 10, wherein the data head end is coupled to the Internet.

14. The head end of claim 10, and further comprising a communication link between the telephony head end and the data head end.

15. The head end of claim 14, wherein the communication link includes at least one T1 or E1 communication link.

16. The head end of claim 10, wherein the network is a hybrid fiber/coax network.

17. The head end of claim 1, wherein the data rate of the downstream transmission is greater than the data rate of the upstream transmission.

18. A method for transporting data over a network, the method comprising:

receiving data from a data source;

modulating the data with a modulation technique that produces a downstream transmission with a first data rate; and

receiving an upstream transmission from a service unit with a second, different data rate over the same network.

19. The method of claim 18, wherein modulating the data with a modulation technique comprises modulating the data with a quadrature amplitude modulation (QAM) 64 modulation.

20. The method of claim 18, wherein receiving data from a data source comprises receiving data from the Internet.

21. The method of claim 18, wherein modulating the data comprises modulating the data for transmission in at least one 6 MHz channel using quadrature amplitude modulation.

22. A service unit for asymmetrical transport of data over a network, the service unit comprising:

a decoder that receives downstream data in a first frequency band over the network with a first data rate; and

a modulator, coupled to the same network, that provides upstream data over the network in a second, different frequency band with a second, different data rate.

23. The service unit of claim 22, wherein the decoder comprises a quadrature amplitude modulation (QAM) 64 decoder.

24. The service unit of claim 22, wherein the modulator provides upstream data with a data rate that is less than the data rate of the downstream data.